2018 Aug-15 PM 10:27 U.S. DISTRICT COURT N.D. OF ALABAMA

Exhibit I

P.E.LaMoreaux & Associates

Consulting Hydrologists, Geologists & Environmental Scientists

August 6, 1979

Mr. Doug Cook, Vice President Alabama By Products Engineering-Mines P.O. Box 10246 Birmingham, AL 35202

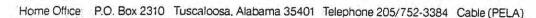
RE: Maxine Mine - Rock Storage-Discharge Problem

Dear Doug:

On August 6, 1979 a visit was made to the Maxine Mine of ABC and in the company of Mr. Jack McDuff, Mr. Sam Gilbert, and Lois Dildine, a careful review was made of the notice of violation issued by the State of Alabama Surface Mining Reclamation Commission signed by Mr. Herb Robbins and received by Mr. Gary Walker of ABC on July 5, 1979.

Specific attention was made to the Rock Storage Area and the total catchment basin related thereto. Discharges through the basin and from the basin were observed and the specific violation "discharge from disturbed areas not within effluent limitations" specifically related to the provisions of the Act, Section 5-23A and 717.17A were inspected along with the treatment undertaken to date to remedy the violation.

Maxine Mine was started in 1953 and the rock waste accummulation since that date constitutes a very large volume of material. The rock material constituting in great part an unconsolidated volume of rubble is now acting as a catchment area for recharge to a perched ground water reservoir system. Water moves from the rock waste disposal area, both as surface water and an underground component of flow. The two sources of water have quite different volumes throughout the year and different quality characteristics. The specific area in violation is a tributary to the Locust Fork, which has in part been filled in with rock disposal material. The discharge point from this tributary is located





Mr. Doug Cook August 6, 1979 Page Two

so that throughout the year there is surface water, groundwater effluent or leachate moving through the rock pile rubble, and a possible component through jointing and bedding plains in the underlying bedrock sandstones and shales.

To effectively solve the problem and develop an adequate and efficient remedial treatment process for it will require the following:

Work Elements

- 1. Air photo analysis to determine previous and existing drainage and interpret dip, strike, joint, pattern.
- Surface geology analysis for ground truth of dip, strike, joint orientation, and lithologic units involved.
- 3. Subsurface geologic information for correlation with surface geology.
- 4. Original topographic map for determination of original drainage prior to 1953.
- 5. New topographic base for determination of re-established drainage.
- 6. Inventory of area to locate and describe all effluent, groundwater/surface water discharge points.
- Collect samples of discharge and determine quantity of discharge. Run chemical analysis for pH, iron, manganese, total dissolved solids, etc.
- 8. Drill two core tests into the base of the rock disposal fill in the tributary and into the bedrock below to determine difference in hydrostatic head.
- Determine location and extent of under ground mines in area for possible exchange of water.

Mr. Doug Cook August 6, 1979 Page Three

- 10. Determine impoundment required to meet ten (10) year, 24-hour event and develope necessary type and size of treatment facilities to control effluent at or below maximum allowable standards.
- 11. Prepare a summary report with necessary text, data, and recommendations.

Sincerely,

Philip E. LaMoreaux, President...

PEL:jt

cc: Mr. Jack McDuff